**ErpCrebit Internal APIs for various Payment Gateways**

# 1. Web Service Specification

## 1.1 Make Payment

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| **API Url** | <http://xxx.erpcrebit.com/Json/PaymentGateway/MakePayment?tokenId=yyy> |
| **Method** | POST |

Where xxx - Any valid Client name of ErpCrebit,

yyy - Token of valid Erpcrebit user

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| **Request Headers** | |
| Content-Type | application/json |

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| **Request Parameters** | | | |
| **Name** | **Description** | **Type** | **Mandatory** |
| DebitAccountFK | Refers to EntryID of table CustomerBankAccount which specifies the account from which you want to debit the money. | Integer | yes |
| PaymentGatewayFK | Refers to EntryID of table PaymentGateway which specified the payment gateway you want to choose to pay with. | Integer | no |
| BatchReference | Unique Reference of current payment batch. | String | yes |
| PaymentRecords | Array of Payment Records | Array | yes |

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| **PaymentRecords Parameters** | | | |
| **Name** | **Description** | **Type** | **Mandatory** |
| CreditAccountFK | Refers to EntryID of table CustomerBankAccount which specifies the account into which you want to credit the money. | Integer | yes |
| Amount | Amount to be credited | Decimal | yes |
| Narration | Description of the transaction | String | yes |
| TransactionReference | Unique Reference of current payment record i.e. current transaction. | String | yes |

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| **Sample Request (Nibss)** |
| {  "DebitAccountFK": 5,  "PaymentGatewayFK": 2,  "BatchReference": "1514360608",  "PaymentRecords": [  {  "CreditAccountFK": 7,  "Amount": 100,  "Narration": "test tran1",  "TransactionReference": "TRef1"  },  {  "CreditAccountFK": 129,  "Amount": 110,  "Narration": "test tran2",  "TransactionReference": "TRef2"  }  ]  } |

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| **Sample Response (Nibss)** |
| {  "success": true,  "paymentGatewayFK": 2,  "data": {  "Header": {  "Status": "16",  "StatusMessage": "REQUEST ACCEPTED",  },  "ResponseStatus": []  }  } |

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| **Sample Request (Gtb)** |
| {  "DebitAccountFK": 1,  "PaymentGatewayFK": 4,  "BatchReference": "1514294428",  "PaymentRecords": [  {  "CreditAccountFK": 2,  "Amount": 100,  "Narration": "test trans1",  "TransactionReference": "abc1"  },  {  "CreditAccountFK": 5,  "Amount": 110,  "Narration": "test trans2",  "TransactionReference": "abc2"  }  ]  } |

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| **Sample Response (Gtb)** |
| {  "success": true,  "paymentGatewayFK": 4,  "data": {  "ResCode": "1000",  "Message": "File Uploaded Successfully",  "Errors": [],  "ValidateTokenResponse": null  }  } |

### Various Payment Gateways’ Response Codes

* **Nibss**

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| --- | --- |
| **Response Code** | **Response Description** |
| 00 | SUCCESSFUL |
| 01 | DUPLICATE UPLOAD |
| 02 | MANDATORY FIELD NOT SET |
| 03 | UNKNOWN CLIENT ID |
| 04 | UNKNOWN UNIQUE ID |
| 05 | FORMAT ERROR |
| 06 | IN PROGRESS |
| 07 | UNKNOWN DEBIT ACCOUNT |
| 99 | SYSTEM ERROR |
| 08 | FAILED NAME VALIDATION |
| 09 | REJECTED BY APPROVER |
| 10 | INVALID NUBAN NUMBER |
| 11 | PAYMENT DISHONOURED BY BANK |
| 12 | PROCESSING COMPLETED WITH ERROR |
| 13 | DEBIT ACCOUNT NOT FOUND |
| 14 | RECORD NOT FOUND |
| 15 | PAYMENT FAILED |
| 16 | REQUEST ACCEPTED |
| 17 | PAYMENT SCHEDULE NOT FOUND |
| 18 | INVALID SCHEDULE ID |
| 19 | BENEFICIARY BANK NOT AVAILABLE |
| 20 | DO NOT HONOR |
| 21 | DORMANT ACCOUNT |
| 22 | INVALID BANK CODE |
| 23 | INVALID BANK ACCOUNT |
| 24 | CANNOT VERIFY ACCOUNT |

* **Gtb**

|  |  |  |
| --- | --- | --- |
| **Response Code** | **Response Description** | **Resolution** |
| 1000 | File Uploaded Successfully | - |
| 1001 | Invalid Username / Password | Reset password on GAPS portal |
| 1002 | Access disabled or not activated | Contact your account officer |
| 1003 | Access to the system is locked | Reset password on GAPS portal |
| 1004 | Password expired | Reset password on GAPS portal |
| 1005 | Invalid file type | Ensure file extension is .txt |
| 1006 | File size exceeds allowed upload limit (1mb) | check file size and ensure it does not exceed 1mb |
| 1007 | File upload error | Format not correct, use profiled format |
| 1008 | File upload error unable to process file | Format not correct, use profiled format |

### Bank Codes/ Sort Codes

* List of 3 digit Bank Codes which can be used to identify the bank

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| --- | --- |
| **Bank Name** | **Bank Code** |
| ACCESS BANK PLC | 044 |
| MAIN STREET BANK NIGERIA PLC | 014 |
| KEYSTONE BANK PLC | 082 |
| DIAMOND BANK PLC | 063 |
| ECOBANK NIGERIA PLC | 050 |
| FIDELITY BANK PLC | 070 |
| FIRST BANK OF NIGERIA PLC | 011 |
| FIRST CITY MONUMENT BANK PLC | 214 |
| GUARANTY TRUST BANK PLC | 058 |
| STANBIC IBTC BANK PLC | 221 |
| CITI BANK | 023 |
| SKYE BANK PLC | 076 |
| ENTERPRISE BANK PLC | 084 |
| STANDARD CHARTERED BANK PLC | 068 |
| STERLING BANK PLC | 232 |
| UNION BANK OF NIGERIA PLC | 032 |
| UNITED BANK FOR AFRICA PLC | 033 |
| UNITY BANK PLC | 215 |
| WEMA BANK PLC | 035 |
| ZENITH INTERNATIONAL BANK PLC | 057 |
| HERITAGE BANK | 030 |
| JAIZ BANK | 301 |

* List of 9 digit Bank Codes which are used to identify bank branch.

|  |  |
| --- | --- |
| **Bank Name** | **Bank Branch Code** |
| ACCESS BANK PLC | 044150149 |
| MAIN STREET BANK NIGERIA PLC | 014150030 |
| KEYSTONE BANK PLC | 082150017 |
| DIAMOND BANK PLC | 063150162 |
| ECOBANK NIGERIA PLC | 050150311 |
| FIDELITY BANK PLC | 070150003 |
| FIRST BANK OF NIGERIA PLC | 011152303 |
| FIRST CITY MONUMENT BANK PLC | 214150018 |
| GUARANTY TRUST BANK PLC | 058152052 |
| STANBIC IBTC BANK PLC | 221159522 |
| CITI BANK | 023150005 |
| SKYE BANK PLC | 076151006 |
| ENTERPRISE BANK PLC | 084150015 |
| STANDARD CHARTERED BANK PLC | 068150057 |
| STERLING BANK PLC | 232150029 |
| UNION BANK OF NIGERIA PLC | 032156825 |
| UNITED BANK FOR AFRICA PLC | 033154282 |
| UNITY BANK PLC | 215082334 |
| WEMA BANK PLC | 035150103 |
| ZENITH INTERNATIONAL BANK PLC | 057150013 |
| HERITAGE BANK | 030159992 |
| JAIZ BANK | 301080020 |

* Note:
* First 3 digits in above 9 digit bank branch codes which are used to identify bank which are also listed in previous table.
* 3 digit Bank Code should be mapped to field CentralBankCode of table Bank and 9 digit Bank Branch Code should be mapped to field SortCode of table BankName.

## Get Payment Status

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| --- | --- |
| **API Url** | <http://xxx.erpcrebit.com/Json/PaymentGateway/GetPaymentStatus?tokenId=yyy> |
| **Method** | POST |

Where xxx - Any valid Client name of ErpCrebit,

yyy - Token of valid Erpcrebit user

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| **Request Headers** | |
| Content-Type | application/json |

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| --- | --- | --- | --- |
| **Request Parameters** | | | |
| **Name** | **Description** | **Type** | **Mandatory** |
| PaymentGatewayFK | Refers to EntryID of table PaymentGateway which specified the payment gateway you want to choose to pay with. | Integer | yes |
| BatchReference | Unique Reference of current payment batch. | String | No,  Yes (Nibss only) |
| TransactionReference | Unique Reference of current payment record i.e. current transaction. | String | No (Nibss Only) Yes |

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| **Sample Request (Nibss)** |
| {  "PaymentGatewayFK": 2,  "BatchReference": "AutoSweepSetup\_372\_14",  "TransactionReference": null  } |

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| **Sample Response (Nibss)** |
| {  "success": true,  "paymentGatewayFK": 2,  "data": {  "PaymentRecord": [  {  "Status": "00",  "ErrorReason": "Paid -28/12/2017 16:52 DA - 2000000 DR-10019189819 - 44891 -\n "  }  ],  "Header": {  "Status": "00",  "StatusMessage": "SUCCESSFUL"  },  "ResponseStatus": [  {  "Status": "00",  "ErrorReason": "Paid -28/12/2017 16:52 DA - 2000000 DR-10019189819 - 44891 -\n "  }  ]  }  } |

|  |
| --- |
| **Sample Request (Gtb)** |
| {  "PaymentGatewayFK": 4,  "BatchReference": null,  "TransactionReference": “TRef”  } |

|  |
| --- |
| **Sample Response (Gtb)** |
| {  "success": true,  "paymentGatewayFK": 4,  "data": {  "ResCode": "1001",  "Message": " :Waiting to be processed",  "Errors": [],  "ValidateTokenResponse": null  }  } |

### Various Payment Gateways’ Response Codes

* **Nibss**

|  |  |
| --- | --- |
| **Response Code** | **Response Description** |
| 00 | SUCCESSFUL |
| 01 | DUPLICATE UPLOAD |
| 02 | MANDATORY FIELD NOT SET |
| 03 | UNKNOWN CLIENT ID |
| 04 | UNKNOWN UNIQUE ID |
| 05 | FORMAT ERROR |
| 06 | IN PROGRESS |
| 07 | UNKNOWN DEBIT ACCOUNT |
| 99 | SYSTEM ERROR |
| 08 | FAILED NAME VALIDATION |
| 09 | REJECTED BY APPROVER |
| 10 | INVALID NUBAN NUMBER |
| 11 | PAYMENT DISHONOURED BY BANK |
| 12 | PROCESSING COMPLETED WITH ERROR |
| 13 | DEBIT ACCOUNT NOT FOUND |
| 14 | RECORD NOT FOUND |
| 15 | PAYMENT FAILED |
| 16 | REQUEST ACCEPTED |
| 17 | PAYMENT SCHEDULE NOT FOUND |
| 18 | INVALID SCHEDULE ID |
| 19 | BENEFICIARY BANK NOT AVAILABLE |
| 20 | DO NOT HONOR |
| 21 | DORMANT ACCOUNT |
| 22 | INVALID BANK CODE |
| 23 | INVALID BANK ACCOUNT |
| 24 | CANNOT VERIFY ACCOUNT |

* **Gtb**

|  |  |  |
| --- | --- | --- |
| **Response Code** | **Response Description** | **Resolution** |
| 1000 | Payment successful | - |
| 1001 | Waiting to be processed | Kindly wait for the transaction to be processed |
| 1002 | Transaction failed | Re-initiate transaction |
| 1003 | Waiting for approval | Kindly approve on the GAPS portal |
| 1004 | Password Expired | Reset password on GAPS portal |
| 1005 | Unable to process request | Cross check the search value |

## Add/Edit Customer Payment Gateway Credentials

* **Add Credentials**

|  |  |
| --- | --- |
| **API Url** | <http://xxx.erpcrebit.com/Json/PaymentGateway/CreateCredentials?tokenId=yyy> |
| **Method** | POST |

Where xxx - Any valid Client name of ErpCrebit,

yyy - Token of valid Erpcrebit user

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| --- | --- |
| **Request Headers** | |
| Content-Type | application/json |

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| **Sample Request** |
| {  "CustomerFK": 581669,  "PaymentGatewayFK": 4,  "PaymentGatewayApiFK": 1,  "CustomerId": "205158352",  "Username": "dapoapar",  "Password": "abcd1234\*",  "PaymentGatewayRoleFK": null,  "PasswordNotes": ""  } |

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| **Sample Response** |
| {  "success": "true",  "customerPaymentGatewayCredentials": [  {  "entryID": "13",  "customerFK": "581669",  "paymentGatewayFK": "4",  "paymentGatewayApiFK": "1",  "customerId": "205158352",  "userName": "dapoapar",  "password": "uwSpAwj/EfRzgKl3uGwQ9Q==",  "createdBy": "793",  "createdOn": "2017-09-16T11:59:31",  "updatedBy": "",  "updatedOn": “”,  "isDeleted": "false",  "sysRowVersion": "4648065589720383488",  "sysRef": "-1/MakePayment-4/GTBank-581669/-4940333/Manan Suthar-",  "paymentGatewayRoleFK": "",  "passwordNotes": "",  "customer\_SysRef": "-4940333/Manan Suthar-",  "customerPK": "581669",  "paymentGateway\_PaymentGatewayName": "GTBank",  "paymentGatewayPK": "4",  "paymentGatewayApi\_ApiName": "MakePayment",  "paymentGatewayApiPK": "1",  "paymentGatewayRole\_RoleName": "",  "paymentGatewayRolePK": "",  "rowFwd": "1",  "rowBwd": "1",  "maxRows": "1"  }  ],  "newUrlPath": "",  "isPopup": "False"  } |

* **Edit Credentials**

|  |  |
| --- | --- |
| **API Url** | <http://xxx.erpcrebit.com/Json/PaymentGateway/EditCredentials?tokenId=yyy> |
| **Method** | POST |

Where xxx - Any valid Client name of ErpCrebit,

yyy - Token of valid Erpcrebit user

|  |  |
| --- | --- |
| **Request Headers** | |
| Content-Type | application/json |

|  |
| --- |
| **Sample Request** |
| {  "EntryID": 13,  "CustomerFK": 581669,  "PaymentGatewayFK": 4,  "PaymentGatewayApiFK": 1,  "CustomerId": "205158352",  "Username": "dapoapar",  "Password": "abcd1234\*",  "PaymentGatewayRoleFK": null,  "PasswordNotes": ""  } |

|  |
| --- |
| **Sample Response** |
| {  "success": "true",  "customerPaymentGatewayCredentials": [  {  "entryID": "13",  "customerFK": "581669",  "paymentGatewayFK": "4",  "paymentGatewayApiFK": "1",  "customerId": "205158352",  "userName": "dapoapar",  "password": "uwSpAwj/EfRzgKl3uGwQ9Q==",  "createdBy": "793",  "createdOn": "2017-09-16T11:59:31",  "updatedBy": "793",  "updatedOn": "2017-12-27T16:33:57",  "isDeleted": "false",  "sysRowVersion": "4648065589720383488",  "sysRef": "-1/MakePayment-4/GTBank-581669/-4940333/Manan Suthar-",  "paymentGatewayRoleFK": "",  "passwordNotes": "",  "customer\_SysRef": "-4940333/Manan Suthar-",  "customerPK": "581669",  "paymentGateway\_PaymentGatewayName": "GTBank",  "paymentGatewayPK": "4",  "paymentGatewayApi\_ApiName": "MakePayment",  "paymentGatewayApiPK": "1",  "paymentGatewayRole\_RoleName": "",  "paymentGatewayRolePK": "",  "rowFwd": "1",  "rowBwd": "1",  "maxRows": "1"  }  ],  "newUrlPath": "",  "isPopup": "False"  } |

* Note: While using PaymentGatewayApiFK field value in above api params, use EntryID of table PaymentGatewayApi with PaymentGatewayApiName field value as shown below:

|  |  |
| --- | --- |
| **PaymentGatewayApiName** | **Description** |
| MakePayment | Api for making payment |
| ViewBalance | Api for checking account balance |
| ViewTransactions | Api for checking account transactions |

# 2. Accounts or Credentials for Test environment

## 2.1 Nibss

|  |  |
| --- | --- |
| **Account Details** | |
| Debit Account Number | 0123456789 |
| Debit Bank Code | 050 |

## 2.2 Gtb

|  |  |
| --- | --- |
| **Credentials** | |
| customer\_Id / accesscode | 205158352 |
| username | dapoapar |
| password | abcd1234\* |

* Note: User has to add/edit credentials using the APIs listed in previous section in case API needs credentials to be posted.